

## **EVALUATION OF IT SKILLS AND NEED OF IL FOR PG ENGINEERING STUDENTS IN JAYAWANT LIBRARY OF RAJARSHI SHAHU COLLEGE OF ENGINEERING, TATHAWADE, PUNE (INDIA): A CASE STUDY**

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### **ABSTRACT**

Use of electronic resources is being increased due to online sources of information needing upgraded level of information literacy. This paper tries to know the need of such training programs for PG engineering students in Rajarshi Shahu College of Engineering, Pune along with purpose, satisfaction and awareness to application Information Technology. Need of training programs are found essential to the students. It was also found that Internet is used widely by engineering students. Survey method based on questionnaire sent online to the respondents was applied as research methodology.

**KEYWORDS:** Information Technology (IT), Information Literacy (IL), Library Automation, Internet, Electronic Resources, Online Resources

### **INTRODUCTION**

Electronic resources available online and offline have become an essential part of library collections at present including libraries of academic institutions. Libraries should be aware of various aspects of its use and attitude of users towards the same. Fewer studies are available on this matter for the engineering college libraries in spite of large number of users in such libraries. Information literacy program, use of Information Technology and the Internet are the main theme of this paper. Library visits are certainly being affected due to unawareness to users' needs in a library by its management.

### **ABOUT RAJARSHI SHAHU COLLEGE OF ENGINEERING**

Rajarshi Shahu College of Engineering, Pune – 33 (called RSCOE hereafter) is a well organized and reputed engineering college affiliated permanently to the Savitibai Phule Pune University (changed from University of Pune in 2014), Pune having a good infrastructure and good library facilities. It has a large number of courses from diploma to PhD and large number of faculty member and students with well equipped class rooms and laboratories. Presently there are about three thousand students in various courses. Awarded by 'Best Professional College' from University of Pune in 2012 signifies its importance among knowledge community.

#### **About RSCOE Jayawant Library**

The College has a well organized and well equipped library with remarkable infrastructure and facilities.

The library has more than thirty four thousand of books, eleven online databases including IEEE Explore and ScienceDirect, more than one hundred national journals in printed format, CDs/DVDs, NPTEL video lectures, case studies and bound volumes of journals from 2001 for users from various departments and courses. The library has ten staffs that are well qualified in their respective fields. The library has various sections such as digital library, reference section, periodical section, reading hall, audio-video hall and stacks. The library is automated by AutoLib library management software.

## OBJECTIVES OF THE STUDY

Following are the objectives of the present study -

- To study the use of IT by PG Engineering Students in Jayawant library.
- To evaluate IT skills of PG engineering students in Jayawant Library.
- To find out the problems of PG Engineering students while using IT facilities
- To assess the need of PG engineering students regarding Information Literacy.
- To know the users satisfaction about library automation.

## REVIEW OF LITERATURE

Adequate number of studies is available on the matter of IT skills and need of information literacy programs; however fewer are concentrated on the engineering college libraries especially for PG students. **Nikam & Kumar** (2013) found that journals, books and theses/dissertations are prominently used electronic resources by research scholars and faculty members. Research works and writing articles were the main purposes of using electronic journals. Shortage of computers was observed as the largest problem in S. U. Patel University Library by **Patel & Patel** (2012). **Talab & Tajafari** (2011) found that on-the-job training (32.0%) and seminars/workshops (30.5%) are preferred mode of ICT training to library staffs in India and Iran compositely. **Nikam & Prabodhini** (2007) indicated that the use of e-resources in the University of Mysore is marginal and scientists need constant guidance and training. **Emwanta, Maria-Gorretti & Kenneth Ivo Ngozi Nwalo** (2013) concludes that computer literacy affects the use of electronic resources in libraries, further stating that differences in subject background create no any recognizable difference in the use of the electronic resources. Homes (75.44%) were found the favourite location of reading of college students in Kashmir by **Shafi & Loan** (2010). **Satyanarayana & Mishra** (2001) conducted a survey on 50 users of the Central Library, Lucknow University to determine the use of Internet. They found that 80% of the users make use of Internet and out of these 10% of them were not able to find relevant research information. More than a decade has been passed after that time confirming heavy use of the Internet. This all shows that use of the Internet is being increased in a general however need of training programs are felt by library visitors as some studies disclose.

## RESEARCH METHODOLOGY

This study evaluates the IT skills among PG engineering students of Jayawant Library. To conduct the present study the online survey method was chosen for which questionnaire was designed for data collection. This study is outcome of a sample of 68. Out of total number of 229 respondents 68 only had responded online. Simple percentage method has been used for analysis of this study.

## DATA ANALYSIS

Data were analyzed after calculations of responses to different options of respective questions in the questionnaire.

### Purpose of Using Information Technology

The survey indicates that updating knowledge (39.7%) and downloading research papers (38.2%) are the two most important reasons to use information technology (IT) as 77.9% of total respondents chosen those as primary reason to use IT. Writing papers is purpose of using IT by 16.2% of respondents. Entertainments are primary reasons for 4.4% of respondents only. One respondent replied that tutorials as the purpose of using IT choosing option 'any other'; using NPTEL video lectures is probable information source to the aforesaid respondent. Hence it is observed that entertainment is not the prime reasons to use IT, but study purposes are the prime reasons to the same.

**Table 1: Purpose of Using Information Technology**

Option	Frequency	%
Updating Knowledge	27	39.7%
Writing papers	11	16.2%
Entertainment	03	4.4%
To download research papers	26	38.2%
Any other	1	1.5%
<b>Total</b>	<b>68</b>	<b>100%</b>

### Awareness to Library Automation

The survey indicates that level of awareness to library automations is medium as 52.9% of respondents replied that they are aware of library automation where 47.1% replied that they are not so (see Table 2). This also signifies that efforts are necessary to make aware of the same by library staffs and administration.

**Table 2: Awareness of Library Automation**

Option	Frequency	%
Yes	36	53%
No	32	47%
<b>Total</b>	<b>68</b>	<b>100%</b>

### User Satisfaction with Library Automation

In a further question, respondents were asked about their satisfaction with library automated services. The respondents replying as unaware of the automation in the previous question were not entertained to this question. Most of them (83.3%) were found satisfied with the services and the rest (16.7%) not satisfied (see table 3). This clears that respondents are satisfied adequately by automated services of the library.

**Table 3: User Satisfaction with Library Automation**

Option	Frequency	%
Satisfied	30	83.3
Not Satisfied	06	16.7
<b>Total</b>	<b>36</b>	<b>100%</b>

### Primary Place to Access Internet

As per findings of the survey, computer centre (41.2%) and the library (32.4%) were found the major sites of

accessing the Internet. Libraries are primary sites of accessing Internet of 32.4% of PG students in RSCOE. Few respondents (8.8%) access the Internet from their homes. Laboratories (11.8%) are also sites of accessing Internet. Classrooms, departments and working places each are selected by one respondent (see Table 4).

**Table 4: Access to Internet**

Options	Frequency	%
Library	22	32.4
Cyber Café	0	0
Computer Center	28	41.2
Home	06	8.8
Any other	12	17.6
<b>Total</b>	<b>68</b>	<b>100%</b>

### Frequency of Using Internet

According to the result obtained by the study, frequency of accessing Internet is very charming as almost half (44.1%) of students responded that they use the Internet daily where one fourth (26.5%) of them use the Internet twice in a week as result 70.6% of them cumulatively access the Internet up to twice in a week (see Table 5). 6.9% and 2.9% of them make a use of the Internet weekly and fortnightly respectively. One fifth (20.6%) of respondents access the Internet when need is experienced by them.

**Table 5: Frequency of Using Internet**

Option	Frequency	%	Cumulative %
Daily	30	44.1	44.1
Twice in a week	18	26.5	70.6
Weekly	04	5.9	76.5
Fortnightly	02	2.9	79.4
As and when needed	14	20.6	100
<b>Total</b>	<b>68</b>	<b>100%</b>	

### Purpose of Using Internet

Preparation of seminar (44.11%) is the most important purpose of students for using internet. 41.17% of respondents use the Internet for study purposes. Emailing is the purpose of accessing Internet by comparatively lesser number (30.88%) of respondents. Three out of 68 respondents access internet for other purposes like IEEE research paper access (one respondent), preparing for competitive examinations (one respondent) and gathering information (one respondent).

**Table 6: Purpose of using Internet**

Purpose	Frequency	%
E Mail	21	30.9%
To know latest trends in industry	12	17.6%
To prepare for seminar	30	44.1%
Study	28	41.2%
Any other specify	3	4.4%
<b>Total</b>	<b>68</b>	<b>100%</b>

### Frequently Used Electronic Resources

When asked about the most frequently used electronic resources from the respondents, 37.1% of each replied that electronic books and electronic journals are the most attended resources by them. NPTEL video lectures of eminent

professors from IITs and IISc were most frequent used electronic resources by one fifth (19.4%) of respondents. Educational CDs/DVDs (4.8%) and online case studies (1.6%) are less used resources by the respondents (see Table 7). It implies that electronic books and electronic journals which are electronic form of textual resources are used by most of the respondents.

**Table 7: Frequently Used Electronic Resources**

Options	Frequency	%
E-Journals	23	37.1
E-Books	23	37.1
NPTEL Video Lectures	12	19.4
Educational CDs/DVDs	3	4.8
Online case studies	1	1.6
<b>Total</b>	<b>62</b>	<b>100%</b>

### Main Problems to Use Online Resources

Low Internet speed (61.5%) and lack of time (26.9%) are the main problems to access online resources. In two of these the earlier problem is generated by the library authorities and management, but lack of time is created on the part of users itself. The two cumulatively are the main problems of 88.4% of respondents. Inadequate IT facilities (7.7%) and lack of proper knowledge (3.8%) are other problems to the respondents (see table 8).

**Table 8: Main Problems to Use Online Resources**

Options	Frequency	%
Low Internet speed	32	61.5
Lack of knowledge	02	3.8
Inadequate IT facilities	04	7.7
Lack of time	14	26.9
Any other specify	No any response	0
<b>Total</b>	<b>52</b>	<b>100%</b>

### Need of Information Literacy Programs for Effective Use of Electronic Resources

Information Literacy is the set of skills needed to find, retrieve, analyze, and use information. It may be hard to acquire accurate and needed information for users without Information literacy training. The above table reveals that 53.3% of respondents need information literacy training for using electronic resources effectively in the library. While 46.7% stated that they do not need any type of training programs. Half proportion of respondents need training programs states that such programs are essential to the library. Such a program was organized in 2012 for faculty members, PG engineering students and library staffs with the help of Global Information System Technology, but a large span of time has been passed and other such programs are inevitable.

**Table 9: Need of Information Literacy Training Programs**

Options	Frequency	%
Yes	32	53.3
No	28	46.7
<b>Total</b>	<b>60</b>	<b>100%</b>

### Preference of Mode of Information Literacy Programs

In a question, PG students were asked about their preference of mode of information literacy programs. Guidance through email (46.6%) was opted by nearly half of respondents followed by guidance on college website (26.3%) and PPT presentation (21.1%). Calling trainer from outside was opted by only 7.0% of respondents showing less interest to the same.

**Table 10: Preference of Mode of Information Literacy Programs**

Options	Frequency	%
PPT presentation	12	21.1
Guidance through E-mail	26	45.6
Guidelines on college website	15	26.3
Calling trainer from outside	4	7.0
Any other specify	0	0
<b>Total</b>	<b>57</b>	<b>100%</b>

### SUGGESTIONS

Based on the above analysis, following are the suggestions in this regard to the librarians and library professionals:

- Efforts are needed to make aware its users about library automated services.
- It is necessary to inform about NPTEL Video lectures, CDS/DVDs and online case studies as very less students know about this.
- Internet speed should be proper in the libraries.
- Information literacy training programs are essential to PG students in an engineering college.
- Guidance regarding information literacy through email and college website needs to be provided.

### CONCLUSIONS

It is clear from the study that PG students need training programs for better use of electronic resources and desire to get that type of information directly from the library. Frequency of accessing Internet is very high very high. Computer centre is the prime site of searching on the Internet. Low Internet speed is the biggest problem during Internet use. Half (47%) of respondents only are aware of library automation and most (83.3%) of them are satisfied with the automated services. Updating knowledge (39.7%) and downloading papers (38.2%) are the main purpose using Information Technology.

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